

IN-LINE GLANDED PUMPS

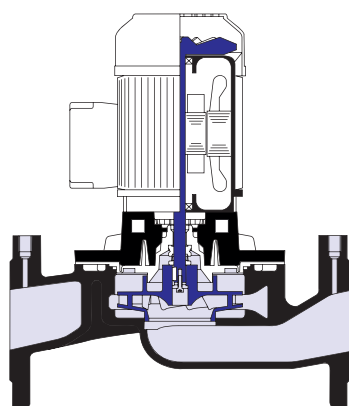
OMEGA



A *reliable* **A** *efficient* **A** *quality*

SMEDEGARD
Pumping Technology

Omega In-Line Glanded Pumps



Omega - Cross Section

Construction

The Omega pumps are of the in-line configuration with the motors mounted directly to the pump body. The stainless steel AISI 316 short shaft extension makes the unit very compact ensuring stable running and long reliable service. The ECOFlexx inverter fitted to the Omega pump incorporates a built-in heat sink and, on larger models cooling fan(s) Pump casing: PN 10 (some models PN 16 as an option) Union connection: 1" and 1 1/4" B.S.P.T, DN32, 40, 50, 65 Flanged DN10, Double Drilled for PN6/10 (DIN 2533). DN80, PN10/16 (DN 2533), option for PN6. DN100, 125, 150, 200, PN10/16 (DN 2533).

Field of application

Commercial and industrial heating systems, district heating schemes, water treatment plants, transfer pumps and refrigeration plants, booster sets, sprinkler, as well as various other applications. Standard pumps in cast iron are supplied suitable for working pressures up to 10 bar, temperature range between -15°C to +120°C (Ambient, max. 40°C). For glycol solutions and other media and temperatures, contact Smedegaard.

Pump medium

Clean, non viscous, non aggressive and non explosive fluids without any solids or fibres. If any liquid other than water is being pumped, we recommend that you contact Smedegaard as the pump characteristics may change.

Model identification

Omega: In-line glanded

Omega ECOFlexx: Inverter control In-line glanded

5: Connection size 50 mm

125: Nominal impeller dia. 125 mm

6: Motor 6-pole (950 rpm)

4: Motor 4-pole (1450 rpm)

2: Motor 2-pole (2900 rpm)

D: Single-case twin

Z: Bronze

Bronze pumps

Some models are also available in bronze "Z" (see range charts and individual data sheets). Bronze models are recommended in H.W.S. secondary installations. The standard bronze models are fitted with a special high quality hard faced mechanical seal, to meet the adverse conditions found in some HWS secondary systems.

Impellers

All impellers are dynamically balanced and incorporate pressure equalising features, resulting in quieter operation and longer bearing life.

Mechanical seal

A standard Crane mechanical seal of - carbon/ceramic - EPDM is fitted within a stainless steel frame. Other material combinations are available for various applications, contact Smedegaard for details.

Motors

Specially constructed motors are used with these pumps to ensure quiet operation, even at 2-pole (2900 rpm) speed. Heavy duty bearings are fitted and packed with vibration suppressing high temperature grease. Standard motors are Class F, IP55, IE2, 3 x 400/230 V incl. 4,8 kW and > 4,8 kW 3x 690/400 V, 50 HZ. Smaller pumps are available with single phase motors. Additionally higher efficiency motors, other protection classes, voltages and enclosures are also available to special order.

Electrical connections

The Omega pumps must be installed with overload protection. The pumps must be connected according to local electrical regulations. See installation guide and wiring diagram in motor terminal box.

Installation

The Omega pumps are suitable for pipeline mounting, with vertical or horizontal shaft. On single-case twin pumps 40 mm and above and on single pumps 80 mm and above, a support foot for floor mounting is available as an optional extra. Note: This foot must be ordered with the pump.

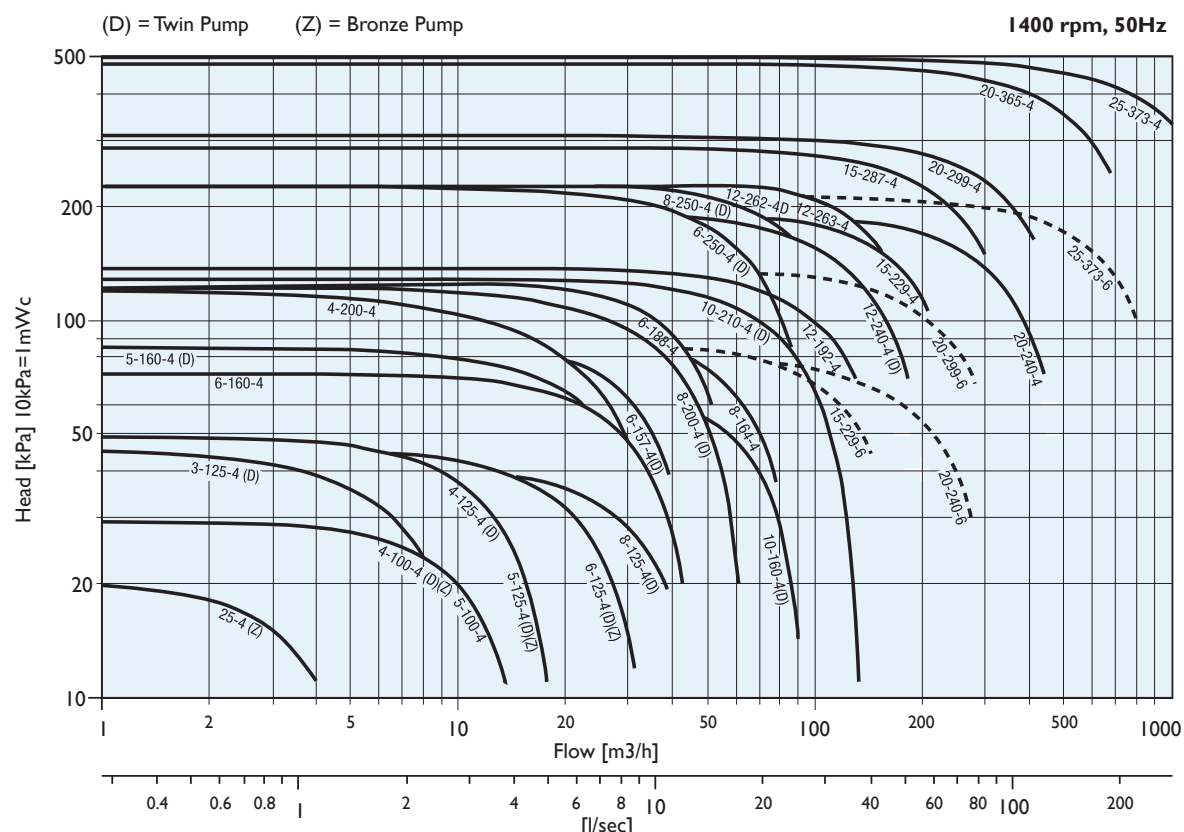
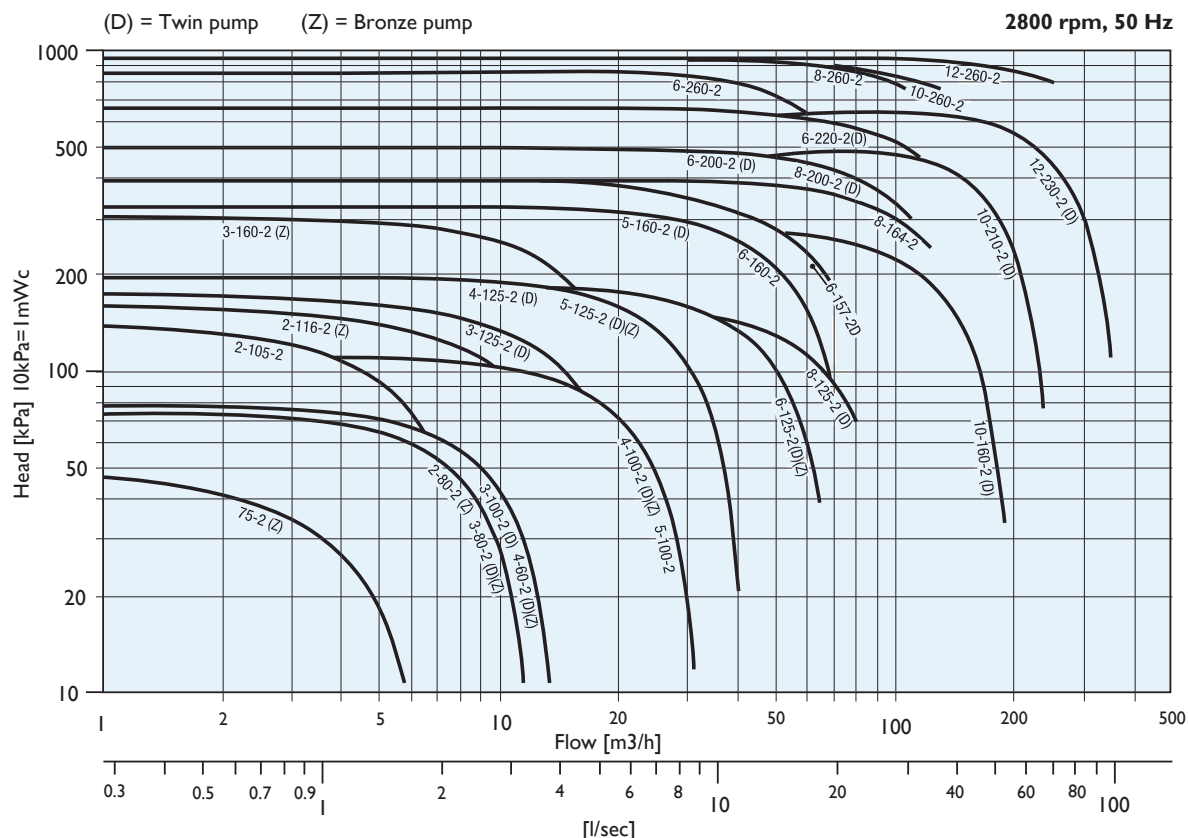
Service

The pumps incorporate "back pull-out facility" which enables mechanical seal replacement without removing pump casing from pipe work. Blanking plates are available for all single and twin models.

Features

- Casings/impellers/motors designed for high efficiency
- Advanced design reduces noise levels
- Non overloading capacity curves
- Impellers statically and hydraulically balanced
- High quality stainless steel shaft, AISI 316
- Temperature range -25°C to +120°C (specials +140°C)

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Data sheets showing the performance curves, dimensions and electrical details are available in printed or electronic copy or may be downloaded at www.smedegaard.co.uk

The pump model may be selected from the range charts just »click« on the type designation, which will open the pump data sheet. Smedegaard's pump selection programme »wpsel« can also be used - see www.smedegaard.co.uk

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Twin Pumps “D”

Most of the Omega range can be supplied as single-case twins, model reference letter D. Two motors and a non-return valve are assembled in the same pump casing and in the majority of cases the overall dimensions and connections remain the same as a single pump.

TAS Twin Pump Manifolds

In addition to the single-case twin pumps, the Smedegaard TAS Twin Manifolds with built-in isolating and non-return valves can be supplied for use with single in-line pumps from 25-125 mm connections. These manifolds are suitable for temperatures up to 110°C with a maximum system pressure of 10 bar and a pump working pressure of 3 bar.



Omega ECOFlexx with Integral Inverter

Single and Twin head Omega pumps can be supplied as Omega ECOFlexx versions complete with ECOFlexx inverters. Up to 7.5kw are available for pump or wall mounting. Wall mounting is preferred for 11kw and above. The ECOFlexx inverter varies the motor speed to maintain a set differential pressure. The control signal can be from either pump mounted transducers or from another source such as a BMS. The pump capacity curves are identical to the standard Omega range. Inverters over 22kw can be supplied upon request. The Omega ECOFlexx concept gives electrical and thermal savings together with a reduced noise level in the installation. (See separate brochure).

ChangeGaard Control

The ChangeGaard change-over panel is suitable for use with our range of single Phase or three Phase inverter controlled pumps. It operates the pumps by controlling the signal input and it is suitable for use with any size of inverter. The ChangeGaard offers fault change-over and timed change-over with two programmable relays suitable for common fault alarm, run indication, plant shut-down, etc. The ChangeGaard time clock can also be over-ridden by a remote signal. As an optional extra the controller can be fitted into a panel incorporating overloads and starters or MCB's giving the ChangeGaard the capability of controlling the power to the pumps. A further feature is the ability to fit a triple relay board to enable remote individual pump run/trip indication.

It is Smedegaard's policy to continually improve and develop its product range. We reserve the right to change specifications without prior notice. Whilst every care has been taken to ensure the data is correct, no responsibility can be taken for inaccuracies or misprints.